Injury - Lead Poisoning
Summary of Methods and Data for Estimate of Costs of Illness

1. Estimated Total Economic Cost $ 17.2 billion
    Estimated Direct Cost $ 11.5 billion
    Estimated Indirect Cost $ 5.7 billion
    Reference Year   1994
    IC Providing the Estimate   NIEHS

    Direct Costs Include: Other related nonhealth costs   Yes
    Indirect Costs Include:
        Mortality costs   Yes
        Morbidity costs: Lost workdays of the patient   Yes
        Morbidity costs: Reduced productivity of the patient   Yes
        Lost earnings of unpaid care givers   No
        Other related nonhealth costs   No
    Interest Rate Used to Discount Out-Year Costs   Not Available
2. Category code(s) from the International Classification of Diseases, 9th Revision, Clinical Modification,(ICD-9-CM) for all diseases whose costs are included in this estimate: 984.
3. Estimate Includes Costs:
        Of related conditions beyond primary, strictly coded ICD-9-CM category   No
        Attributable to the subject disease as a secondary diagnosis   No
        Of conditions for which the subject disease is an underlying cause   No
4. Population Base for Cost Estimate (Total U.S. pop or other)   Total U.S. pop.
5. Annual (prevalence model) or Lifetime (incidence model) Cost: Annual
6. Perspective of Cost Estimate (Total society, Federal budget, or Other)   Total Society
7. Approach to Estimation of Indirect Costs   Human Capital

8. Source of Cost Estimate: (Reference published or unpublished report, or address and telephone of person/office responsible for estimate)

    Swartz, J. Societal benefits of reducing lead exposure. 1994. Environmental Research. 66, 105-124.

9. Other Indicators of Burden of Disease:

According to the Centers for Disease Control and Prevention (CDC) over one million children in the U.S. have blood lead levels high enough to cause irreversible damage to their health. In 1997, the U.S. Department of Housing and Urban Development estimated that approximately 4 million homes where young children live contain lead-based paint hazards.

10. Commentary:

An estimate, according to the above reference, of 1 ug/dl reduction in blood lead concentrations will result in approximately 3200 fewer strokes per year, and 3300 fewer myocardial infarctions per year, 1300 fewer strokes per year, and 3300 fewer deaths per year. Although the percentage

of both U.S. adults and children with elevated blood lead (>10ug/dl) have been steadily decreasing since 1980, there is still a significant number of children who are at high risk for lead exposure. Children are the most vulnerable population to the detrimental health effects of lead poisoning. The high societal costs for the harm to U.S. children resulting from lead poisoning cannot be completely captured.